

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 6405

Petition of Washington Electric Cooperative,)
Inc., requesting authority to issue a note in)
the amount of \$5,048,000 to the Rural Utilities)
Service in re: 2001-2004 Work Plan)

Order entered: 3/28/2001

I. INTRODUCTION

Pursuant to a petition filed with the Vermont Public Service Board ("Board") on July 24, 2000, Washington Electric Cooperative, Inc. ("WEC") requested authority under 30 V.S.A. §108 to issue a note in the amount of \$5,048,000 to the Rural Utilities Service of the United States Department of Agriculture ("RUS").

On February 28, 2001, the Vermont Department of Public Service ("DPS") filed with the Board a determination under 30 V.S.A. § 202 (f), that the proposed financing and the implementation of the 2001-2004 Work Plan ("Work Plan") are consistent with the Vermont Twenty-Year Electric Plan.

On March 1, 2001, the DPS and WEC submitted a Memorandum of Understanding ("MOU") which outlines a number of additional obligations for WEC in implementing the Work Plan.

II. FINDINGS

1. WEC is a Vermont electric cooperative, regulated by the Board, and engaged in the business of supplying electric power to Caledonia, Orange, Orleans, and Washington Counties. Work Plan at 14.

2. RUS will issue a loan of \$5,048,000 to WEC to be repaid over a period of thirty-five years at an interest rate of 5 percent per annum. As a part of the loan commitment, WEC has prepared a Work Plan outlining the projects WEC plans to construct over the period 2001-2004. The RUS loan is intended to fund these construction projects. Funds will not be advanced by

RUS to WEC until such time as actual construction of the above requirements is either undertaken or completed. Principal and interest payments will be payable on a monthly basis. This loan will be secured by a first mortgage heretofore granted by WEC to the United States of America, acting through RUS. The RUS loan will be ratably secured by a certain mortgage and pledge of real and personal property dated as of November 18, 1971, as amended and supplemented, made by and among WEC, and RUS. Petition at pp. 3-5.

3. The 2001-2004 Work Plan will concentrate on the following:

(1) Service Extensions For 610 New Member ¹	\$1,556,285
(2) Deduct - Contributions In-Aid-Of Construction	<u>1,436,645</u>
(3) Net Service Extensions	119,640
(4) Line Replacement - 42.94 miles	1,424,733
(5) New Substations	735,000
(6) Air Break Switches	18,000
(7) Miscellaneous Distribution Equipment	3,061,456
(8) Other Distribution Items	<u>20,200</u>
Total Net Capital Expenditures	\$5,379,029
(9) Deduct - Loan Funds Available For Facilities	<u>331,029</u>
Total Proposed Work Plan	<u><u>\$5,048,000</u></u>

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4. As of January 2000, WEC's transmission system consisted of 18.4 miles of transmission line in service. Work Plan at 16.

5. As of January 2000, WEC's distribution system consisted of 1,222.1 miles of line. An analysis of the distribution line is summarized as follows: 1,056.8 miles of primary overhead distribution line in service; 8.6 miles of primary underground line; and 156.7 miles of service and secondary overhead line. The entire distribution system is conducted and operated at 7.2/12.47 kV grounded wye. *Id.* at 16.

6. The average annual outage hours per consumer for the past five years (1995-1999) is summarized as follows:

<u>Average Outage Hours Per Consumer</u>	<u>Five Years</u>	<u>1999</u>
Power supply	1.1796	.522
Extreme Storm	7.7452	17.941
Perranged	1.1374	.400
All Other	<u>4.0522</u>	<u>2.421</u>
Total	<u><u>14.1144</u></u>	<u><u>21.284</u></u>

1. The service extensions for the projected 610 new costumers at a cost of \$1,556,285 will be reduced by \$1,436,645 when member contributions-in-aid of construction are considered.

RUS has established a goal of two hours per member per year for service interruptions, five hours maximum, for all rural electric cooperatives. *Id.* at 20.

7. WEC's outage summaries for the five-year period indicate that 54.87 percent of all outages were caused by extreme storm damage and related tree contacts. It is probable that the 28.71 percent of other outages of unknown origin were also due to tree contacts. *Id.* at 20.

8. WEC's line losses, including substation transformer and transmission losses, for the past five years have averaged 9.64 percent per year. With the construction of the proposed projects, system losses are expected to be reduced to 7.54 percent. *Id.* at 24.

9. The peak system coincident demand to date is 13,575 kW which occurred in December of 1999. *Id.* at 29.

10. The system forecast with demand-side management ("DSM") indicates a customer growth of 2.09 percent in 2000. With DSM in place, it is projected that the kWh purchased per consumer will be reduced from the 6,415 kWh in 1999 to 6,171 kWh in 2004 and the 1999 demand of 13,575 kW will increase to 13,803 kW in 2004. *Id.* at 29.

11. A summary of the cost estimate components, designated by RUS loan application code, is summarized as follows:

<u>Description</u>	<u>Estimated Cost</u>
100 - New Line Extensions Construction Cost	\$1,556,285
Deduct: Contributions-In-Aid-of-Construction	<u>1,436,645</u>
Net - Adjusted New Line Extension Construction Cost	119,640
200 - New Tie Lines	000
300 - Conversions and Line Changes	1,424,733
400 - New Substations	735,000
500 - Substation Changes	18,000
600 - Miscellaneous Distribution Equipment	
601 - Transformers	733,050
601 - Meters	85,250
602 - Service Improvements	74,825
603 - Sectionalizing Equipment	55,000
604 - Voltage Regulators	0
605 - Capacitors	12,000
607 - Miscellaneous Changes	779,765
608 - System Improvements Pole Changes	<u>1,321,155</u>
Total Code 600	3,061,045
700 - Other Distribution Items - Security Lights	<u>20,200</u>
Total Proposed Work	<u><u>\$5,378,618</u></u>

Id. at 56.

12. The Parties have identified additional activities outside the Work Plan that would further enhance WEC's system reliability and that would secure cost-effective loss reduction. MOU at 1.

13. WEC will retain the services of a qualified engineering consultant to develop a computer load flow model of WEC's system. MOU at 2.

14. WEC shall use the computer load flow model of its system to conduct a study that includes, at a minimum, the following components:

- (1) a system-wide fuse coordination and protective device study that identifies optimal fuse and oil circuit recloser sizing, placement and settings;
- (2) identification of all cost-effective capacitor installations;
- (3) identification of all cost-effective phase balancing;
- (4) identification of the optimal placement of normally-open switches;
- (5) identification of substations and circuits that may become thermally overloaded or voltage constrained within the next five years;
- (6) determination of the economical utilization of secondary voltage (240/120) lines for the purpose of serving multiple locations, as opposed to the placement of individual transformers;
- (7) identification of cost-effective tie-lines together with operating procedures for utilizing tie-line capabilities; and
- (8) identification of all cost-effective conservation voltage regulation strategies.

Id. at 2.

15. WEC will develop an implementation plan to incorporate those measures identified by the study required by Finding 14, above. *Id.* at 2.

16. The results of this study, together with the implementation plan, shall be filed with the Board and the Department not later than one year from the date this MOU is executed.

Id. at 3.

17. Upon filing with the Board and the Department, the results of the study and the implementation plan shall be deemed to supplement and amend the Work Plan. RUS has agreed to allow WEC to change the Work Plan based upon the study and implementation plan. *Id.* at 3.

18. The Parties agree that this MOU relates only to these Parties and should not be construed by any party or tribunal as having precedential or any other impact on proceedings involving other utilities. The Parties have made compromises on specific issues to reach the agreement set forth in this MOU. Except to enforce the utility's obligations under this MOU, no party or tribunal shall construe this MOU as having precedential impact in this or any other proceeding involving the Parties. The Parties reserve the right in any future proceedings in this or any other docket to advocate positions that differ from those set forth in this MOU. *Id.* at 4.

III. DISCUSSION

Based upon the findings and evidence in the record, I find that the proposed borrowing, as adjusted by the MOU, from RUS by WEC in the amount of \$5,048,000, and the mortgage and pledge of WEC's property as security for payment of the proposed notes in the face amount of \$5,048,000 as set forth above, are consistent with the general good of the State of Vermont.

The foregoing is hereby reported to the Public Service Board in accordance with the provisions of 30 V.S.A. § 8.

The parties to this proceeding waive, pursuant to 3 V.S.A. § 811, the right to comment on this Proposal for Decision.

DATED at Montpelier, Vermont, this 26th day of March, 2001.

s/Ennis John Gidney
Ennis John Gidney
Hearing Officer

VI. ORDER

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board of the State of Vermont that:

1. The Findings of the Hearing Officer are adopted and affirmed by the Board.
2. The Board consents to the issuance by Washington Electric Cooperative, Inc., of a mortgage note to the United States of America, acting through the Administrator of the Rural Utilities Service, in the amount of \$5,048,000, as set forth in the Findings, above.
3. The Board consents to the mortgage and pledge of real and personal property of Washington Electric Cooperative, Inc., as set forth in the Findings, above.
4. This Order does not constitute approval of any particular capital or operating expenditure nor the underlying capital structure that Washington Electric Cooperative, Inc. may implement with the proceeds from the issuance of debt under its Agreement with the Rural Utilities Service. Nothing in this approval shall preclude the Department or any other party, or the Board, from reviewing or challenging those expenditures and/or the Washington Electric Cooperative, Inc. resulting capital structure in any future proceeding.

DATED at Montpelier, Vermont, this 28th day of March, 2001.

<u>s/Michael H. Dworkin</u>)	
)	
)	PUBLIC SERVICE
)	
<u>s/David C. Coen</u>)	
)	BOARD
)	
)	OF VERMONT
<u>s/John D. Burke</u>)	

OFFICE OF THE CLERK

FILED: March 28, 2001

ATTEST: s/Susan M. Hudson
Clerk of the Board

Notice to Readers: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or mail) of any technical errors, in order that any necessary corrections may be made. (E-mail address: Clerk@psb.state.vt.us)

Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal will not stay the effect of this Order, absent further Order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and order.

